



# **STIC Search Report**

## **Biotech-Chem Library**

**STIC Database Tracking Number: 171744**

**TO: Vanessa L Ford**  
**Location: REM-3B25&2C18**  
**Art Unit: 1645**  
**Monday, November 21, 2005**

*3C18*

**Case Serial Number: 09/596101**

**From: Paul Schulwitz**  
**Location: Biotech-Chem Library**  
**REM-1A65**  
**Phone: 571-272-2527**

**Paul.schulwitz@uspto.gov**

### **Search Notes**

Examiner Ford,

Please review the attached search results.

If you have any questions or if you would like to refine the search query, please feel free to contact me at any time.

Thank you for using STIC search services!

Paul Schulwitz  
Technical Information Specialist  
REM-1A65  
571-272-2527

171744

From: Chan, Christina  
Sent: Wednesday, November 16, 2005 12:17 PM  
To: Ford, Vanessa; STIC-Biotech/ChemLib  
Subject: RE: In e: 09/596,101 Sequence search

Please rush. Thanks Chris

Chris Chan  
TC 1600 New Hire Training Coordinator and SPE 1644  
(571)-272-0841  
Remsen, 3E89

(KFE)

-----Original Message-----

From: Ford, Vanessa  
Sent: Wednesday, November 16, 2005 9:57 AM  
To: Chan, Christina  
Subject: In e: 09/596,101 Sequence search

Please search SEQ ID NO:1 and 3. Please include interference searches. Please rush.

Vanessa L. Ford  
Biotechnology Patent Examiner  
Office: REM 3B25  
Mailbox: REM 3C18  
Phone: 571.272.0857  
Art unit:1645

\*\*\*\*\*

Searcher: \_\_\_\_\_  
Searcher Phone: \_\_\_\_\_  
Date Searcher Picked up: \_\_\_\_\_  
Date completed: \_\_\_\_\_  
Searcher Prep Time: \_\_\_\_\_  
Online Time: \_\_\_\_\_

\*\*\*\*\*

Type of Search  
NA# \_\_\_\_\_ AA# \_\_\_\_\_  
S/L: \_\_\_\_\_ Oligomer: \_\_\_\_\_  
Encode/Transl: \_\_\_\_\_  
Structure #: \_\_\_\_\_ Text: \_\_\_\_\_  
Inventor: \_\_\_\_\_ Litigation: \_\_\_\_\_

\*\*\*\*\*

Vendors and cost where applicable

STN: \_\_\_\_\_  
DIALOG: \_\_\_\_\_  
QUESTEL/ORBIT: \_\_\_\_\_  
LEXIS/NEXIS: \_\_\_\_\_  
SEQUENCE SYSTEM: \_\_\_\_\_  
WWW/Internet: \_\_\_\_\_  
Other (Specify): \_\_\_\_\_

GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using SW model

Run on: November 17, 2005, 16:55:19 ; Search time 1.57179 Seconds  
(without alignments)  
795.793 Million cell updates/sec

Title: US-09-596-101c-1

Perfect score: 64

Sequence: 1 SGEIDIIETIGNR 13

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

1: p1r1:\*

2: p1r2:\*

3: p1r3:\*

4: p1r4:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

| Result No. | Score | Query Match Length | DB ID  | Description |
|------------|-------|--------------------|--------|-------------|
| 1          | 45    | 70.3               | 294 2  | D70525      |
| 2          | 45    | 70.3               | 499 2  | JC6141      |
| 3          | 44    | 68.8               | 301 2  | C87296      |
| 4          | 43    | 67.2               | 411 2  | UC7869      |
| 5          | 43    | 67.2               | 1356 2 | B87311      |
| 6          | 43    | 67.2               | 1377 2 | AG3345      |
| 7          | 43    | 67.2               | 1378 2 | AB2817      |
| 8          | 43    | 67.2               | 1411 2 | C97595      |
| 9          | 41    | 64.1               | 736 2  | T06757      |
| 10         | 40    | 62.5               | 815 2  | B56708      |
| 11         | 40    | 62.5               | 1302 2 | T43230      |
| 12         | 40    | 62.5               | 1342 1 | RNEBBT      |
| 13         | 40    | 62.5               | 1342 1 | RNECB       |
| 14         | 40    | 62.5               | 1342 1 | S32680      |
| 15         | 40    | 62.5               | 1342 1 | A84934      |
| 16         | 40    | 62.5               | 1342 2 | C86090      |
| 17         | 40    | 62.5               | 1342 2 | AE0933      |
| 18         | 40    | 62.5               | 1342 2 | F91242      |
| 19         | 40    | 62.5               | 1342 2 | AC0456      |
| 20         | 40    | 62.5               | 1342 2 | HE4073      |
| 21         | 40    | 62.5               | 1375 2 | R82336      |
| 22         | 40    | 62.5               | 1389 2 | T30824      |
| 23         | 40    | 62.5               | 1392 2 | D82007      |
| 24         | 40    | 62.5               | 1392 2 | A81236      |
| 25         | 40    | 62.5               | 1655 2 | S47446      |
| 26         | 39    | 60.9               | 286 2  | S48201      |
| 27         | 39    | 60.9               | 369 2  | AH0451      |
| 28         | 39    | 60.9               | 642 2  | B72428      |
| 29         | 39    | 60.9               | 665 2  | S52072      |

|    |    |      |        |        |                    |
|----|----|------|--------|--------|--------------------|
| 30 | 39 | 60.9 | 795 2  | A97627 | hypothetical prote |
| 31 | 39 | 60.9 | 795 2  | AC2850 | GADP family prote  |
| 32 | 39 | 60.9 | 967 2  | T48210 | hypothetical prote |
| 33 | 39 | 60.9 | 1324 2 | T18265 | endo-1,3(4)-beta-g |
| 34 | 38 | 59.4 | 263 2  | A72349 | conserved hypotet  |
| 35 | 38 | 59.4 | 298 2  | S75156 | hypothetical prote |
| 36 | 38 | 59.4 | 371 1  | MMECKR | inner membrane pro |
| 37 | 38 | 59.4 | 371 2  | B91256 | inner membrane pro |
| 38 | 38 | 59.4 | 544 2  | F86096 | inner membrane pro |
| 39 | 38 | 59.4 | 544 2  | T45498 | hypothetical prote |
| 40 | 38 | 59.4 | 608 2  | T28301 | ORF NSV140 hypotet |
| 41 | 38 | 59.4 | 1103 2 | T06918 | DNA-directed RNA p |
| 42 | 38 | 59.4 | 1143 2 | S73173 | DNA-directed RNA p |
| 43 | 37 | 57.8 | 309 1  | RUSMAG | agarase (EC 3.2.1. |
| 44 | 37 | 57.8 | 316 2  | T46000 | hypothetical prote |
| 45 | 37 | 57.8 | 625 2  | G97076 | alkaline phosphata |

## ALIGNMENTS

RESULT 1  
D70525  
probable beta-1 - Mycobacterium tuberculosis (strain H37RV)  
C/Species: Mycobacterium tuberculosis  
C/Date: 17-Jul-1998 #sequence\_revision 17-Jul-1998 #text\_change 09-Jul-2004  
C/Accession: D70525  
R/Cole, S.T.; Broesch, R.; Parhill, J.; Garnier, T.; Churcher, C.; Harris, D.; Gordon, J.; Connor, R.; Davies, R.; Devlin, K.; Gentles, S.; Hamlin, N.; Hollroyd, S.; Rajandream, M.A.; Rogers, J.; Rutter, S.; Seeger, K.; Skelton, S.; Squares, S.; Nature 393, 537-544, 1998  
A/Authors: Squares, R.; Suleston, J.E.; Taylor, K.; Whitehead, S.; Barrett, B.G.  
A/Title: Deciphering the biology of Mycobacterium tuberculosis from the complete genome  
A/Reference number: A70500; MUID:9825987; PMID:9634230  
A/Accession: D70525  
A/Status: preliminary; nucleic acid sequence not shown; translation not shown  
A/Molecule type: DNA  
A/Residues: 1-294 <COL>  
A/Cross-references: UNIPROT:O07242; GB:296800; GB:AL123456; NID:G3261800; PIDN:CAM09586  
A/Experimental source: strain H37RV  
C/Genetics: A/Gene: RV0315

Query Match 70.3% Score 45; DB 2; Length 294;  
Best Local Similarity 75.0%; Pred. No. 1.9;  
Matches 9; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 1 SGEIDIIETIGN 12  
Db 169 SGEIDIIETIGN 180

RESULT 2  
JC6141  
beta 1,3-glucanase (EC 3.2.1.-) precursor - sea urchin (Strongylocentrotus purpuratus)  
C/Species: Strongylocentrotus purpuratus (purple urchin)  
C/Date: 11-Apr-1997 #sequence\_revision 09-May-1997 #text\_change 09-Jul-2004  
C/Accession: JC6141; PC6037  
R/Bachman, E.S.; McClay, D.R.  
Proc. Natl. Acad. Sci. U.S.A. 93, 6808-6813, 1996  
A/Title: Molecular cloning of the first metazoan beta-1,3 glucanase from eggs of the sea urchin  
A/Reference number: JC6141; MUID:96270625; PMID:8692900  
A/Accession: JC6141  
A/Molecule type: mRNA  
A/Residues: 1-499 <BAC>  
A/Cross-references: UNIPROT:Q26660; GB:U49711; NID:G1488256; PIDN:AAC47235.1; PID:G1488  
A/Accession: PC6037  
A/Molecule type: protein  
A/Residues: 21-40197-209;329-344 <BA2>  
A/Experimental source: egg  
C/Comment: This enzyme functions in several extracellular activities including autocatalytic defense enzymes in plants.  
C/Keywords: egg; glycosidase; hydrolase

GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Compugen Ltd.

# OM protein - protein search, using SW model

Run on: November 17, 2005, 16:55:04 ; Search time 5.9597 Seconds  
(without alignments)  
843,648 Million cell updates/sec

Title: US-09-596-101c-1  
Perfect score: 64  
Sequence: 1 SGRDITETIGNR 13

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 2105692 seqs, 386760381 residues

Total number of hits satisfying chosen parameters: 2105692

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

## Database :

1: Geneseq\_16Dec04:.\*  
2: Geneseqp19808:.\*  
3: Geneseqp19908:.\*  
4: Geneseqp20008:.\*  
5: Geneseqp20018:.\*  
6: Geneseqp20028:.\*  
7: Geneseqp20038:.\*  
8: Geneseqp20048:.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

| Result No. | Score | Query Match | Length | ID      | Description       |
|------------|-------|-------------|--------|---------|-------------------|
| 1          | 64    | 100.0       | 13     | AA24915 | AA24915 E1senia f |
| 2          | 64    | 100.0       | 384    | AA24914 | AA24914 E1senia f |
| 3          | 50    | 78.1        | 306    | AA24914 | AA24914 E1senia f |
| 4          | 45    | 70.3        | 294    | AA24914 | AA24914 E1senia f |
| 5          | 44    | 68.8        | 263    | AA24914 | AA24914 E1senia f |
| 6          | 44    | 68.8        | 303    | AA24914 | AA24914 E1senia f |
| 7          | 44    | 68.8        | 303    | AA24914 | AA24914 E1senia f |
| 8          | 44    | 68.8        | 303    | AA24914 | AA24914 E1senia f |
| 9          | 43    | 67.2        | 1356   | AA24914 | AA24914 E1senia f |
| 10         | 43    | 67.2        | 1356   | AA24914 | AA24914 E1senia f |
| 11         | 43    | 67.2        | 1356   | AA24914 | AA24914 E1senia f |
| 12         | 43    | 67.2        | 1356   | AA24914 | AA24914 E1senia f |
| 13         | 41    | 64.1        | 1356   | AA24914 | AA24914 E1senia f |
| 14         | 40    | 62.5        | 205    | AA24914 | AA24914 E1senia f |
| 15         | 40    | 62.5        | 205    | AA24914 | AA24914 E1senia f |
| 16         | 40    | 62.5        | 254    | AA24914 | AA24914 E1senia f |
| 17         | 40    | 62.5        | 434    | AA24914 | AA24914 E1senia f |
| 18         | 40    | 62.5        | 501    | AA24914 | AA24914 E1senia f |
| 19         | 40    | 62.5        | 533    | AA24914 | AA24914 E1senia f |
| 20         | 40    | 62.5        | 575    | AA24914 | AA24914 E1senia f |
| 21         | 40    | 62.5        | 575    | AA24914 | AA24914 E1senia f |
| 22         | 40    | 62.5        | 652    | AA24914 | AA24914 E1senia f |
| 23         | 40    | 62.5        | 815    | AA24914 | AA24914 E1senia f |
| 24         | 40    | 62.5        | 815    | AA24914 | AA24914 E1senia f |
| 25         | 40    | 62.5        | 815    | AA24914 | AA24914 E1senia f |

|    |    |      |      |          |                    |
|----|----|------|------|----------|--------------------|
| 26 | 40 | 62.5 | 816  | ADQ20078 | AdQ20078 Human scf |
| 27 | 40 | 62.5 | 816  | ADQ15148 | AdQ15148 Human can |
| 28 | 40 | 62.5 | 827  | ABU25227 | ABU25227 Protein e |
| 29 | 40 | 62.5 | 987  | ADL05331 | AdL05331 M. catarr |
| 30 | 40 | 62.5 | 1078 | ABU27628 | ABU27628 Protein e |
| 31 | 40 | 62.5 | 1080 | ABG04194 | ABG04194 Protein e |
| 32 | 40 | 62.5 | 1173 | ABU21190 | ABU21190 Protein e |
| 33 | 40 | 62.5 | 1342 | AAU34845 | AAU34845 E. coli c |
| 34 | 40 | 62.5 | 1342 | ABU47164 | ABU47164 Protein e |
| 35 | 40 | 62.5 | 1342 | ABU14805 | ABU14805 Protein e |
| 36 | 40 | 62.5 | 1342 | ABU49890 | ABU49890 Protein e |
| 37 | 40 | 62.5 | 1342 | ABU39467 | ABU39467 Protein e |
| 38 | 40 | 62.5 | 1342 | ABU47992 | ABU47992 Protein e |
| 39 | 40 | 62.5 | 1342 | ADG42855 | ADG42855 Bacterial |
| 40 | 40 | 62.5 | 1342 | ADG45221 | ADG45221 Bacterial |
| 41 | 40 | 62.5 | 1343 | AAU35444 | AAU35444 Haemophil |
| 42 | 40 | 62.5 | 1343 | ABU30272 | ABU30272 Protein e |
| 43 | 40 | 62.5 | 1351 | ABM70460 | ABM70460 Photorhab |
| 44 | 40 | 62.5 | 1360 | ABO60676 | ABO60676 Klebsiell |
| 45 | 40 | 62.5 | 1362 | ABU17069 | ABU17069 Protein e |

## ALIGNMENTS

RESULT 1  
AA24915  
ID AA24915 standard; peptide; 13 AA.

AC AA24915;  
DT 17-OCT-2003 (revised)  
DT 25-AUG-1999 (first entry)

DE E1senia foetida coelomic cytolitic factor 1 peptide.

KW E1senia foetida; coelomic cytolitic factor 1; CCF-1; cancer;  
KW trypanosomal infection; bacterial infection; tumour therapy;  
KW inflammation; immunology.

OS E1senia foetida.

PN WO9931229-A2.

PD 24-JUN-1999.

PP 16-DEC-1998; 98WO-EP008169.

PR 17-DEC-1997; 97EP-00203974.

PA (VLAAS-) VLAAMS INTERUNIVERSITAIR INST BIOTECHNOG.

PI De Baetselier P;

DR WPI; 1999-385905/32.

PT E1senia foetida polypeptides derived from coelomic cytolitic factor 1.

PS Claim 1; Page 45; 49pp; English.

XX The present sequence represents a E1senia foetida coelomic cytolitic  
XX factor 1 (CCF-1) peptide. The CCF-1 protein has antiparasitic,  
XX antibacterial and anti-inflammatory activity. Recombinant coelomic  
XX cytolitic factor 1 (CCF-1) is trypanolytic for the African trypanosome  
XX Trypanosoma Brucei in a dose-dependent manner. The trypanolytic activity  
XX of rCCF-1 can be inhibited by anti-CCF-1 and anti-tumour necrosis factor  
XX (TNF)/TIP monoclonal antibodies. Furthermore, N,N'-diacetylchitobiose  
XX inhibits potentially trypanolytic activity of rCCF-1. These data corroborate  
XX the findings that CCF-1 shares a trypanolytic, lectin-like domain with  
XX TNF-alpha. CCF-1 is useful to treat trypanosomal or bacterial infections  
XX or cancer. The proteins and peptides are also useful in tumour therapy,  
XX inflammation and other areas of immunology. The amino acid sequence is  
XX derived from a 42 kDa cytolitic protein named CCF-1 that binds

GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Comugen Ltd.

## OM protein - protein search, using sw model

Run on: November 17, 2005, 16:55:19 ; Search time 59.0025 Seconds  
(without alignments)  
485,831 Million cell updates/sec

Title: US-09-596-101C-3  
Perfect score: 2240  
Sequence: 1 MRLTLVLLLFGEGRFTD.....DDEGNNAMQVDYIRYKRN 384

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Maximum Match 100%

Listing first 45 summaries

## Database :

Issued Patents AA: \*  
1: /cgn2\_6/ptodata/1/1aa/5A.COMB.pep.\*  
2: /cgn2\_6/ptodata/1/1aa/5B.COMB.pep.\*  
3: /cgn2\_6/ptodata/1/1aa/6A.COMB.pep.\*  
4: /cgn2\_6/ptodata/1/1aa/6B.COMB.pep.\*  
5: /cgn2\_6/ptodata/1/1aa/PCTUS.COMB.pep.\*  
6: /cgn2\_6/ptodata/1/1aa/backfile1.pep.\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysts of the total score distribution.

## SUMMARIES

| Result No. | Score | Query Match | Length | DB ID | Description          |
|------------|-------|-------------|--------|-------|----------------------|
| 1          | 357   | 15.9        | 321    | 2     | US-08-712-072C-3     |
| 2          | 351.5 | 15.7        | 262    | 1     | US-08-392-828C-37    |
| 3          | 351.5 | 15.7        | 262    | 3     | US-09-330-945-37     |
| 4          | 350   | 15.6        | 303    | 3     | US-09-159-106-13     |
| 5          | 344.5 | 15.4        | 276    | 3     | US-08-712-072C-4     |
| 6          | 340.5 | 15.2        | 263    | 3     | US-09-159-106-2      |
| 7          | 307   | 13.7        | 306    | 2     | US-08-824-707-2      |
| 8          | 286.5 | 12.8        | 285    | 2     | US-08-712-072C-5     |
| 9          | 286.5 | 12.2        | 422    | 2     | US-08-712-072C-2     |
| 10         | 275   | 10.3        | 470    | 4     | US-09-902-540-16052  |
| 11         | 231   | 10.2        | 229    | 4     | US-09-902-540-15416  |
| 12         | 228.5 | 10.2        | 429    | 4     | US-08-392-828C-2     |
| 13         | 208   | 9.3         | 654    | 1     | US-08-330-945-2      |
| 14         | 208   | 9.3         | 654    | 3     | US-09-330-945-2      |
| 15         | 181   | 8.1         | 134    | 4     | US-09-270-767-33162  |
| 16         | 163.5 | 7.3         | 176    | 4     | US-09-270-767-44425  |
| 17         | 129.5 | 5.8         | 292    | 2     | US-08-737-526-4      |
| 18         | 129.5 | 5.8         | 292    | 2     | US-09-098-580-4      |
| 19         | 112.5 | 5.0         | 738    | 1     | US-07-985-458-3      |
| 20         | 112.5 | 5.0         | 954    | 4     | US-09-570-8568-31    |
| 21         | 111.5 | 5.0         | 622    | 3     | US-09-311-6268-4     |
| 22         | 110   | 4.9         | 243    | 3     | US-09-286-690-10     |
| 23         | 108   | 4.8         | 720    | 4     | US-09-538-092-815    |
| 24         | 107.5 | 4.8         | 545    | 3     | US-09-259-731-8      |
| 25         | 107.5 | 4.8         | 545    | 4     | US-09-988-200-8      |
| 26         | 106   | 4.7         | 238    | 4     | US-09-286-690-7      |
| 27         | 101.5 | 4.5         | 743    | 4     | US-09-248-796A-17353 |

|    |      |     |      |   |                      |                   |
|----|------|-----|------|---|----------------------|-------------------|
| 28 | 101  | 4.5 | 465  | 4 | US-09-658-772-2      | Sequence 2, Appl  |
| 29 | 101  | 4.5 | 465  | 4 | US-10-159-487-2      | Sequence 2, Appl  |
| 30 | 100  | 4.5 | 237  | 1 | US-08-103-998-4      | Sequence 4, Appl  |
| 31 | 99.5 | 4.4 | 1231 | 4 | US-08-714-741-41     | Sequence 41, Appl |
| 32 | 99   | 4.4 | 279  | 3 | US-09-286-690-9      | Sequence 9, Appl  |
| 33 | 99   | 4.4 | 539  | 4 | US-09-719-402A-2     | Sequence 2, Appl  |
| 34 | 98.5 | 4.4 | 239  | 1 | US-08-103-998-4      | Sequence 2, Appl  |
| 35 | 98.5 | 4.4 | 308  | 4 | US-09-463-862A-1     | Sequence 1, Appl  |
| 36 | 96.5 | 4.3 | 685  | 4 | US-09-252-991A-32033 | Sequence 32033, A |
| 37 | 96   | 4.3 | 478  | 4 | US-09-107-532A-4922  | Sequence 4922, Ap |
| 38 | 95   | 4.3 | 814  | 4 | US-09-486-072-1      | Sequence 1, Appl  |
| 39 | 95   | 4.2 | 1722 | 4 | US-09-194-612A-1     | Sequence 1, Appl  |
| 40 | 94.5 | 4.2 | 276  | 4 | US-09-719-402A-6     | Sequence 6, Appl  |
| 41 | 94.5 | 4.2 | 1278 | 4 | US-09-604-957-3      | Sequence 3, Appl  |
| 42 | 93.5 | 4.2 | 1052 | 3 | US-09-360-237-1      | Sequence 1, Appl  |
| 43 | 93.5 | 4.2 | 1052 | 4 | US-09-891-711-6      | Sequence 6, Appl  |
| 44 | 93   | 4.2 | 829  | 4 | US-09-252-991A-27150 | Sequence 27150, A |
| 45 | 92.5 | 4.1 | 312  | 3 | US-09-216-295-21     | Sequence 21, Appl |

## ALIGNMENTS

RESULT 1.  
US-08-712-072C-3  
Sequence 3, Application US/08712072C  
Patent No. 5925541  
GENERAL INFORMATION:  
APPLICANT: Jack Goldstein, Alex Zhu and Lin Leng  
TITLE OF INVENTION: ENDO-BETA-GALACTOSIDASE  
NUMBER OF SEQUENCES: 13  
CORRESPONDENCE ADDRESS:  
ADDRESSER: Amster, Rothelein & Ebenstein  
STREET: 90 Park Avenue  
CITY: New York  
STATE: NY  
COUNTRY: US  
ZIP: 10016  
COMPUTER READABLE FORM:  
MEDIUM TYPE: 3.5 INCH 1.44 MB STORAGE DISKETTE  
OPERATING SYSTEM: MS-DOS  
SOFTWARE: ASCII  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/712,072C  
FILING DATE: 11-SEP-1996  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER:  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Bogosian, Elizabeth A.  
REGISTRATION NUMBER: 39,911  
REFERENCE/DOCKET NUMBER: 63475/97  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 697-5995  
TELEFAX: (212) 286-0854 or 286-0082  
TELEX: TWX 710-581-4766  
INFORMATION FOR SEQ ID NO: 3:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 321 amino acids  
TYPE: amino acid  
STRANDEDNESS:  
TOPOLOGY: linear  
MOLECULAR TYPE: peptide  
HYPOTHEICAL: NO  
ANTI-SENSE: NO  
FRAGMENT TYPE:  
ORIGINAL SOURCE:  
ORGANISM: e13b, Bacillus circularis  
US-08-712-072C-3  
Query Match 15.9%; Score 357; DB 2; Length 321;



GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: November 17, 2005, 16:55:19 ; Search time 46.4282 Seconds  
(without alignment)  
795.793 Million cell updates/sec

Title: US-09-596-101c-3  
Perfect score: 2240  
Sequence: 1 MRMTLVVCLFEGEGFAFTD.....DDEGDNMAQVDYIKVRKN 384

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database :  
1: pir1:\*  
2: pir2:\*  
3: pir3:\*  
4: pir4:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

| Result No. | Score | Query Length | ID     | Description |
|------------|-------|--------------|--------|-------------|
| 1          | 713   | 31.8         | 499 2  | JC6141      |
| 2          | 369.5 | 16.5         | 877 2  | UN0772      |
| 3          | 353   | 15.8         | 1324 2 | T18265      |
| 4          | 351.5 | 15.7         | 682 2  | J00420      |
| 5          | 350   | 15.6         | 301 2  | C87296      |
| 6          | 344.5 | 15.4         | 286 2  | S48201      |
| 7          | 314   | 14.0         | 467 2  | JC6150      |
| 8          | 312.5 | 14.0         | 411 2  | JC7869      |
| 9          | 284   | 12.7         | 642 2  | B72428      |
| 10         | 209   | 9.3          | 673 2  | A49878      |
| 11         | 179.5 | 8.0          | 466 2  | J75164      |
| 12         | 176   | 7.9          | 465 2  | AB2985      |
| 13         | 176   | 7.9          | 462 2  | H88288      |
| 14         | 175.5 | 7.8          | 485 2  | G95973      |
| 15         | 167   | 7.5          | 465 2  | H95369      |
| 16         | 148   | 6.6          | 364 2  | T17584      |
| 17         | 138.5 | 6.2          | 294 2  | D70525      |
| 18         | 132   | 5.9          | 419 2  | T39920      |
| 19         | 125.5 | 5.6          | 1144 2 | A75132      |
| 20         | 125   | 5.6          | 857 2  | B69788      |
| 21         | 116.5 | 5.2          | 878 2  | A83748      |
| 22         | 115   | 5.1          | 284 2  | T06200      |
| 23         | 112.5 | 5.0          | 738 2  | S14270      |
| 24         | 112.5 | 5.0          | 954 1  | S20907      |
| 25         | 111   | 5.0          | 282 2  | A85354      |
| 26         | 110.5 | 4.9          | 856 2  | T00349      |
| 27         | 110   | 4.9          | 243 1  | S15388      |
| 28         | 109   | 4.9          | 781 2  | A43866      |
| 29         | 109   | 4.9          | 807 2  | B82158      |

|    |       |     |       |        |   |
|----|-------|-----|-------|--------|---|
| 30 | 108   | 4.8 | 282 2 | T02354 | xyloglucan endo-1,4-beta-glucanase (EC 3.2.1.4) |
| 31 | 108   | 4.8 | 636 2 | T37843 | probable beta-glucanase (EC 3.2.1.4)            |
| 32 | 108   | 4.8 | 720 2 | S61143 | KRE6 protein - yea                              |
| 33 | 107.5 | 4.8 | 758 2 | T48815 | mixed-linked glucanase (EC 3.2.1.4)             |
| 34 | 107.5 | 4.8 | 772 2 | T02098 | probable phosphatidyl transferase (EC 3.1.3.1)  |
| 35 | 106   | 4.7 | 238 1 | S19012 | licheninase (EC 3.2.1.4)                        |
| 36 | 106   | 4.7 | 742 2 | A49340 | alcohol dehydrogenase (EC 1.1.1.1)              |
| 37 | 106   | 4.7 | 782 1 | G64157 | alcohol dehydrogenase (EC 1.1.1.1)              |
| 38 | 105   | 4.7 | 802 2 | A36910 | alcohol dehydrogenase (EC 1.1.1.1)              |
| 39 | 104.5 | 4.7 | 239 1 | A29091 | alcohol dehydrogenase (EC 1.1.1.1)              |
| 40 | 103.5 | 4.6 | 484 2 | AH1419 | alcohol dehydrogenase (EC 1.1.1.1)              |
| 41 | 103.5 | 4.6 | 484 2 | A11794 | alcohol dehydrogenase (EC 1.1.1.1)              |
| 42 | 103.5 | 4.6 | 851 2 | H64053 | alcohol dehydrogenase (EC 1.1.1.1)              |
| 43 | 103   | 4.6 | 289 2 | F71402 | alcohol dehydrogenase (EC 1.1.1.1)              |
| 44 | 102.5 | 4.6 | 276 2 | F14053 | alcohol dehydrogenase (EC 1.1.1.1)              |
| 45 | 102.5 | 4.6 | 334 1 | S23498 | alcohol dehydrogenase (EC 1.1.1.1)              |

## ALIGNMENTS

|   |  |
|---|--|
| RESULT 1  | beta 1,3-glucanase (EC 3.2.1.4) precursor - sea urchin (Strongylocentrotus purpuratus) |
| C:Species: Strongylocentrotus purpuratus (purple urchin)  |  |
| C:Date: 11-Apr-1997 #sequence_revision 09-May-1997 #text_change 09-Jul-2004   |  |
| C:Accession: JC6141; PC6037   |  |
| R:Bachman, B.S.; McClay, D.R.   |  |
| Proc. Natl. Acad. Sci. U.S.A. 93, 6808-6813, 1996   |  |
| A:Title: Molecular cloning of the first metazoan beta-1,3 glucanase from eggs of the sea urchin                         |  |
| A:Reference number: JC6141; MUID:96270625; PMID:8692900   |  |
| A:Accession: JC6141   |  |
| A:Molecule type: mRNA   |  |
| A:Residues: 1-499 <BAC>   |  |
| A:Cross-references: UNIPROT: Q26660; GB: U49711; NID: G1488256; PID: A47235.1; PID: G1486                               |  |
| A:Experimental source: Egg  |  |
| C:Comment: This enzyme functions in several extracellular activities including autocatalytic cleavage of the substrate. |  |
| C:Keywords: egg; glycosidase; hydrolase   |  |
| P:1-20/Domain: signal sequence #status predicted <SIG>  |  |
| P:21-499/Product: beta 1,3-glucanase #status predicted <MAT>  |  |
| Query Match   | 31.8%; Score 713; DB 2; Length 499;  |
| Best Local Similarity   | 42.7%; Pred. No. 1.4e-49;  |
| Matches   | 158; Conservative 48; Mismatches 88; Indels 76; Gaps 15;                               |
| 26  | ITWODEFDYDGAHQHVTATGGNSFQLYTODGANSFVRDQKLFKPTLLADNINPQ 85                              |
| 179   | LIFQBERFDSFVLDIWHBMHTAGGGNWFYETTNRSNYSYRDQKLFKPTLLTDK---- 235                          |
| 86  | TGAFFGDTFPMNGVLDVWAMTGA--CINTDNGCCTRTGACD-IIPMANSARVTPQKYSF 142                        |
| 236   | -----GGGSLSSGTLDMGSSPANTCTGNAMWGGSRGSDNMLNLPQSARLRTVESFSF 290                          |
| 143   | THGRVVAHAKPVPVDMPLPAILMPLPDMVYGGWRSGEIDITIGNRDFKNGTGEPTGI 202                          |
| 291   | KYGRLEKVBALCLPTGDMPLMPLMPLPKANGYGEWPSGEIDLVESRGADIKDAGLSAGV 350                        |
| 203   | QKMGSTWAGPQMDNRYWLTSLPKHSDDMNNGDFTFWFDWSPNGLRFFVDDENQALL 262                           |
| 351   | DMGSGTWAGPFPWPLNGY-----PK-----THATKPYVDE----- 381                                      |
| 263   | DVPEPLIDANPWWVDPEWNGKPMPLPYEN-----DNWAGGTM-LAPPDQNFHLLNAV 316                          |
| 382   | -----LILNVDP-ATGFDWLG-----EPENDAPGIDNWMVNPNTLTPPDDEFYLLNAV 431                         |
| 317   | GGTNGFIPDGCINRGSD-----PALQKPSNGWVNDAMKFPDARNGWMTWDEBDNN 371                            |
| 432   | GGTNYF-----GDGLTYTTPA--KPSNDS--PLASQDFWSDFTWYPTAN--GSEA 476                            |